

FIGURE 1

APGK12 (SEQ ID NO 1) Replicon RNA compared to 1377/NS2-3' Replicon RNA

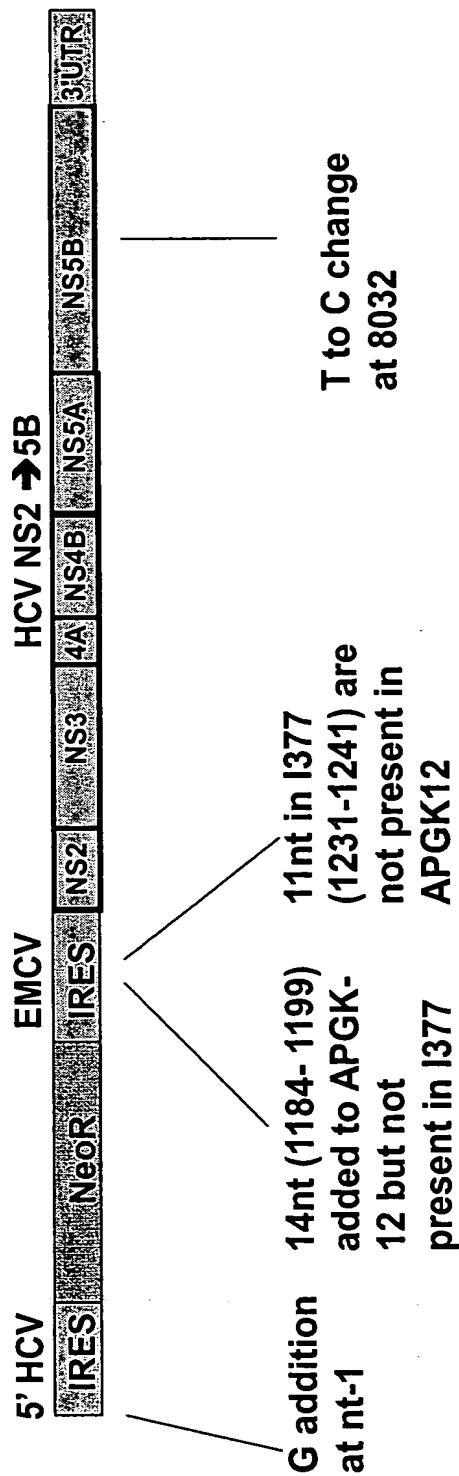
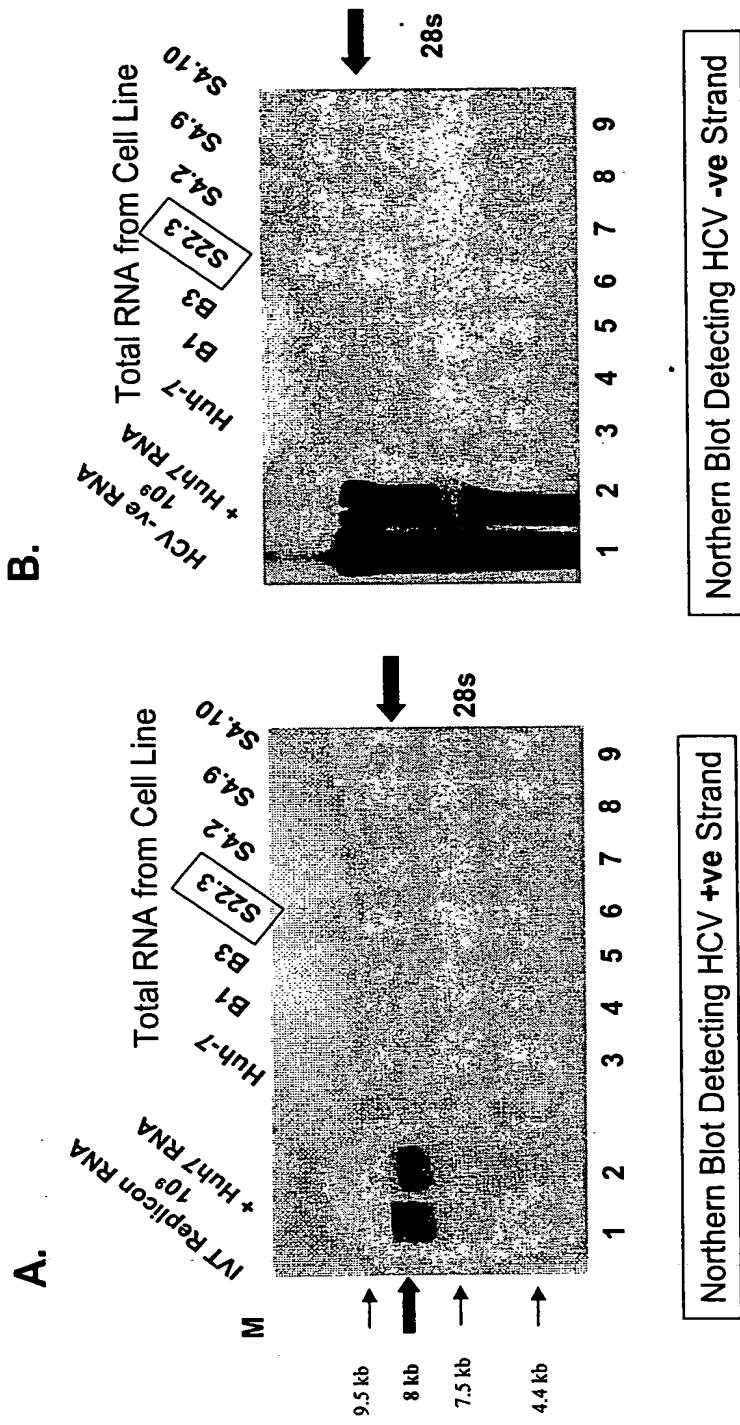


FIGURE 2



Northern Blot Detecting HCV +ve Strand

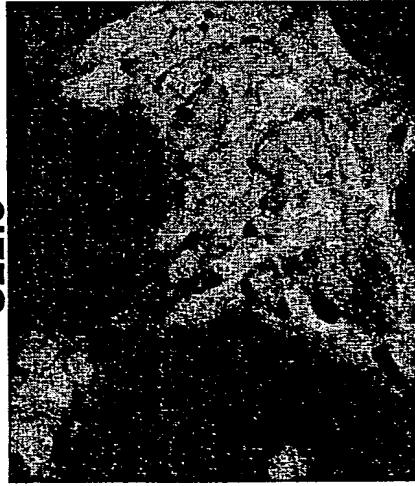
Northern Blot Detecting HCV -ve Strand

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FIGURE 3

A.

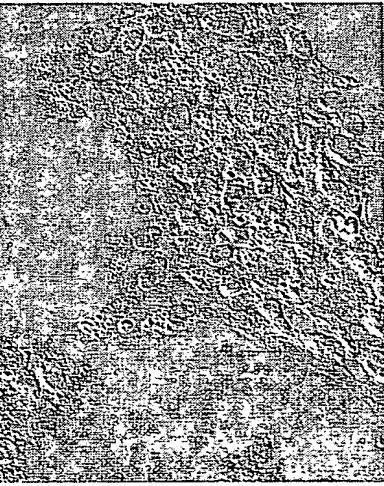
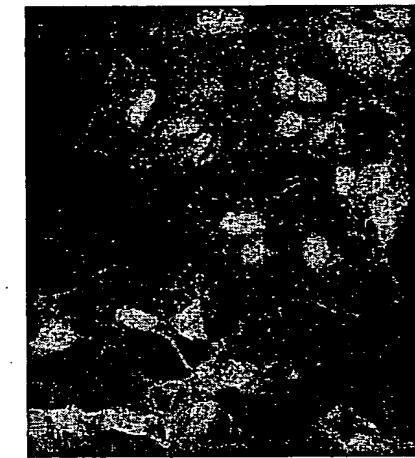
S22.3



B.

B1

Anti-HCV NS4A
Immunofluorescence

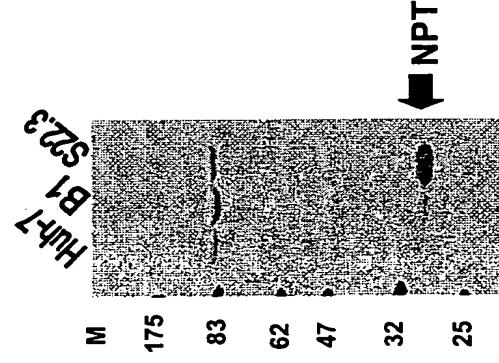


DIC Microscopy

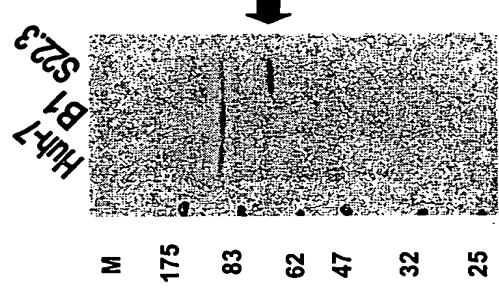
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FIGURE 4

A.



B.



C.

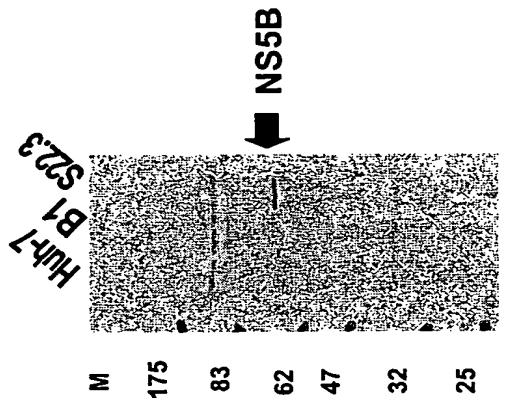


FIGURE 5A

S 22-3 SEQ ID NO 2	R3 SEQ ID NO. 4	R3-rep SEQ ID NO. 7	R7 SEQ ID NO. 5	R16 SEQ ID NO 6
5'end - FIRST nt (HCV IRES)	"G (nt 1) A	G (nt 1) A	-	G (nt 1) A
EMCV IRES	-	A (nt 1739) G	-	-
NS 2	-	-	-	-
NS 3	-	G (nt 2778) A A (nt 2840) C A (nt 4052) G	T (nt 2509) C G (nt 2778) A A (nt 2840) C T (nt 3574) C A (nt 4052) G	A (nt 2816) G A (nt 2879) G
NS 4A	-	A (nt 446) R A (nt 446) G	C (nt 4487) T A (nt 446) G C (nt 430) T	C (nt 4475) T
NS 4B	-	T (nt 4855) C	T (nt 4855) C	-
NS 5A	-	G (nt 498) T A (nt 626) R	A (nt 551) G G (nt 598) T G (nt 599) A C (nt 591) T A (nt 668) G	G (nt 598) C G (nt 570) C G (nt 590) C G (nt 584) C
NS 5B	-	A (nt 6652) G	-	C (nt 7252) T T (nt 8349) C

*first nt = G from HCV ire

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FIGURE 5B

	S 22-3 SEQ ID NO. 2	R3 SEQ ID NO. 4	R3 Rep SEQ ID NO. 7	R7 SEQ ID NO. 5	R16 SEQ ID NO. 6
5'end - FIRST nt (HCV IRES)	G (nt 1) A	G (nt 1) A	-	-	G (nt 1) A
NS 2	-	-	-	-	-
NS 3	-	R (1135) K S (1560) G	R (1135) K S (1560) G	E (1202) G	S (1148) G E (1202) G
NS 4A	K (1691) mix K/R	K (1691) R	K (1691) R	-	L (1701) F
NS 4B	-	-	-	-	-
NS 5A	T (1993) A G (2042) C	T (1993) A G (2042) C	G (2042) C L (2155) P	G (2042) C P (2166) L	V (1984) G S (2404) P
NS 5B	-	-	-	M (2992) T	-
3'end-las 98 nt	-	-	-	-	-

first a.a. of NS2 = 810

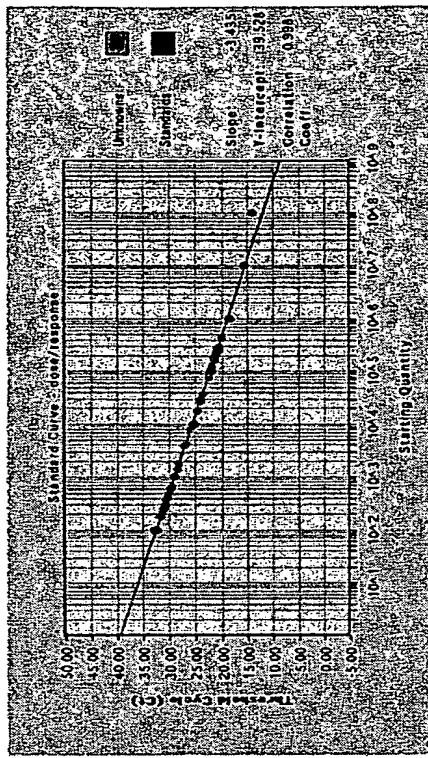
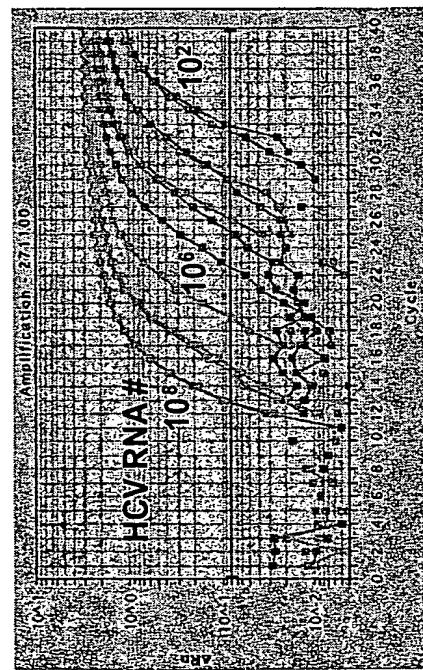
FIGURE 6
AMINO ACID SUBSTITUTIONS

CLONE APGK-12	5' HCV IRES	EMCV NeoR	HCV NS2 → 5B NS3 NS4A	3' HCV UTR NS5B
G (nt1) SEQ ID NO 1 77 cfu/ug		-	-	-
A (nt1) SEQ ID NO 24 86 cfu/ug		-	-	-
R3 rep A(nt1) SEQ ID NO 25 1100000cfu/ug		R(1135)K S(1560)G	K(1691)R -	T(1993)A G(2042)C L(2155)P P(2166)L
G(nt1) SEQ ID NO 7 2000000cfu/ug		R(1135)K S(1560)G	K(1691)R -	T(1993)A G(2042)C L(2155)P P(2166)L

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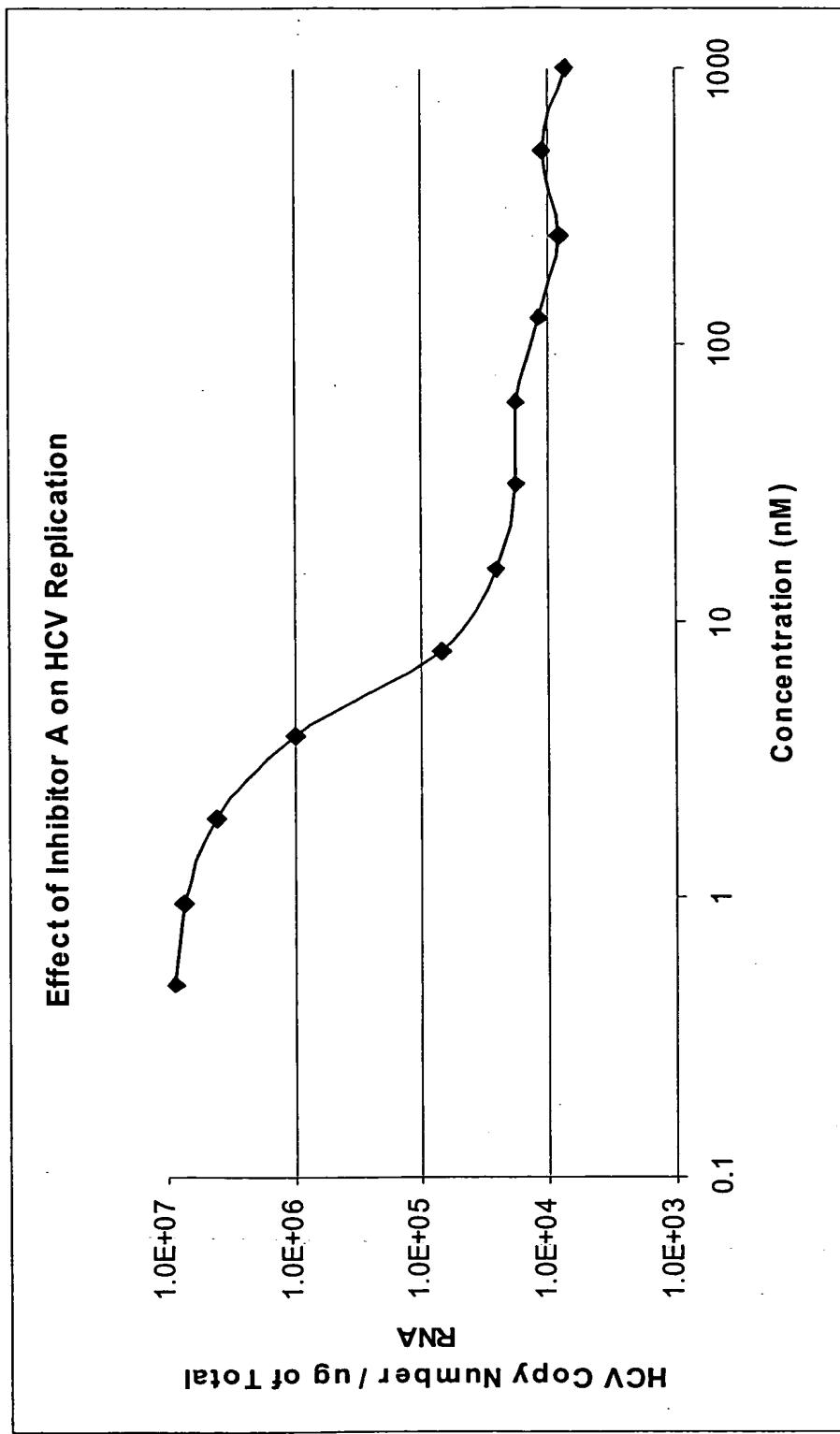
FIGURE 7

HCV-Replicon: RNA Quantification



C_t = Threshold cycle α Starting RNA Quantity

FIGURE 8



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